## **CLAIMS**

## What is claimed is:

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1	1. A multiple wavelength output light source, comprising:
2	a laser device having a plurality of output wavelengths;
3	a demultiplexer for separating the plurality of output wavelengths; and
4	a plurality of modulators associated with and configured to modulate each
5	wavelength
1	2. The light source of claim 1, wherein the laser device, the plurality of
2	modulators and the demultiplexer are fabricated on one substrate and comprise one
3	module.
1	The light source of claim 1, wherein the plurality of output wavelengths
2	represents the output spectrum of the laser device.
1	4. The light source of claim 1, further comprising an optical filter
2	configured to receive the plurality of output wavelengths and modify each wavelength
3	to a predetermined profile.
1	5. The light source of claim 1, wherein the laser device is a Fabry-Perot
2	laser.

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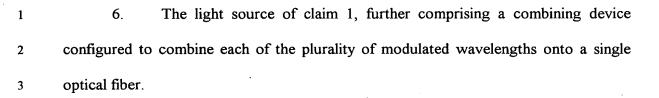
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- 7. The light source of claim 1, wherein the laser device has a spectral distribution including distinct peaks, each of the output wavelengths corresponding to a different one of the peaks.
- A method for forming a broad spectrum modulated laser output, the method comprising:

  providing a laser device having a plurality of output wavelengths;
- separating the plurality of output wavelengths; and
  modulating each of the plurality of output wavelengths.
  - 9. The method of claim 8, further comprising forming the laser device and performing the modulating step and the separating step on a single module.
  - 10. The method of claim 8, wherein the plurality of output wavelengths represents the output spectrum of the laser device.
- 1 11. The method of claim 8, further comprising modifying each wavelength to a predetermined profile.
  - 12. The method of claim 8, wherein the laser device is a Fabry-Perot laser.

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1	13.	The met	hod o	f claim	8,	further	comprising	combining	each	of	the
2	plurality of mo	dulated o	utput v	vavelen	gth	s onto a	single optica	ıl fiber.			

- A method for forming a broad spectrum modulated laser output, the 1 14. 2 method comprising the steps of:
- providing a Fabry-Perot laser device having a plurality of outputs, each output 3 at a different spectral location; 4
- separating the plurality of outputs; and 5
  - modulating each of the plurality of outputs with communication information resulting in a plurality of modulated outputs.
- 15. The method of claim 14, further comprising forming the Fabry-Perot 1 laser device and performing the modulating step and the separating step on a single 2 module.
- 16. The method of claim 14, wherein the plurality of output wavelengths 1 represents the output spectrum of the laser device. 2
- The method of claim 14, further comprising modifying each wavelength 17. 1 to a predetermined profile. 2
- The method of claim 14, further comprising combining each of the 1 . 18. plurality of modulated outputs onto a single optical fiber.  $\mathbf{2}$

	gnent Docket No. 10004262
1	19. An optical system comprising:
2	a laser that outputs plural wavelengths; and
3	modulator means for modulating each of the wavelengths independently.
1	The apparatus of claim 19, further comprising separator means for
2	spatially separating the plural wavelengths upstream of their modulation by the
3	modulator means.
1	21. The apparatus of claim 20, further comprising combiner means for
2	spatially combining the wavelengths as modulated by the modulator means.
. 1	22. The apparatus of claim 19, wherein the laser has a spectral distribution
2	including distinct peaks, each of the wavelengths corresponding to a different one of
3	the peaks.
1	An optical method comprising:
2	operating a laser to provide an output characterized by plural wavelengths, and
3	modulating the plural wavelengths independently.

- 24. The method of claim 23, further comprising separating the plural wavelengths upstream of the modulating.
- 25. The method of claim 24, further comprising combining the wavelengths downstream of the modulating.

- 26. The method of claim 23, wherein the wavelengths correspond to
- distinct peaks in the spectral distribution of the output of the laser.